

REMARKS

The following Amendment is submitted in response to the Final Office Action of 3/3/2005. In the Final Office Action, claims 14-21 were restricted and claims 2-13 were rejected. In this Amendment, claims 9 and 10 have been canceled and new claim 22 has been added. Accordingly, claims 2-8 and 11-22 remain pending after entry of this Amendment.

I. Election/Restriction of Claims

In the Final Office Action, claims 2-13 (Invention I) were elected and claims 14-21 (Invention II) were restricted. The Examiner stated that Inventions I and II are related as process of making and product made. Under MPEP 806.05(f), a process of making and a product made by the process can be shown to be distinct inventions if either or both of the following can be shown: (A) that the process as claimed is not an obvious process of making the product and the process as claimed can be used to make other and different products; or (B) that the product as claimed can be made by another and materially different process. The Examiner stated that Inventions I and II are independent and distinct inventions in that the process of making could be used for making semi-conductors and associated materials.

Applicants hereby elect with traverse claims 2-13 and request reconsideration of the restriction of claims 14-21. MPEP 806.05(f) states that a process of making and a product made by the process can be shown to be distinct inventions if it is shown that the process as claimed is *not an obvious process* of making the product and the process as claimed can be *used to make other and different products* (emphasis added). Contrary to the Examiner's position, Applicants submit that neither of these prongs are met under MPEP 806.05(f) in regards to independent claims 2 (product) and 14 (process).

First, the process of making a product, as claimed in independent claim 14, *is* an obvious process of making the product, as claimed in independent claim 2. Independent claim 2 recites a

MEMS structure comprising a platform connected with a set of bimorph flexures. In comparison, independent claim 14 recites a method for fabricating a MEMS structure by forming a platform connected with a set of bimorph flexures. Applicants submit that a MEMS structure comprising a platform connected with a set of bimorph flexures (i.e., the product made) would be made by
5 fabricating the MEMS structure by forming a platform connected with a set of bimorph flexures (i.e., the process for making the product) is obvious on its face.

Independent claim 2 further recites that each bimorph flexure comprises a first layer comprised of a first material and a second layer comprised of a second material being different than the first material, the first and second materials having substantially similar CTEs. In
10 comparison, independent claim 14 further recites, for each bimorph flexure, forming a first layer comprised of a first material and forming a second layer comprised of a second material that is different than the first material, the first and second materials having substantially similar CTEs. Applicants further submit that a bimorph flexure comprising a first layer comprised of a first material and a second layer comprising a second material being different than the first material,
15 the first and second materials having substantially similar CTEs (i.e., the product made) would be made by forming a first layer comprised of a first material and forming a second layer comprised of a second material that is different than the first material, the first and second materials having substantially similar CTEs (i.e., the process for making the product) is obvious on its face.

Second, the process as claimed can not be used to make other and different products. The
20 process as claimed in claim 14 requires forming a platform connected with a set of bimorph flexures, and for each bimorph flexure, forming a first layer comprised of a first material and forming a second layer comprised of a second material that is different than the first material, the first and second materials having substantially similar CTEs. If the process of claim 14 is followed, the process produces the MEMS structure of claim 2 and no other different products.

Applicants respectfully request that the Examiner cite another product that can be produced using the process of claim 14 and how this product would differ from the product recited in claim 2.

For the above reasons, Applicants submit that claims 14-21 are not properly restricted under MPEP 806.05(f) and request reconsideration and withdrawal of the restriction requirement
5 regarding these claims.

II. Rejection Under U.S.C. 102(b)

In the Office Action, claims 2-5, 8-10, and 13 were rejected under U.S.C. 102(b) as being anticipated by Miller et al. (U.S. Patent No. 6,759,787, hereinafter Miller). Claim 2 recites a microelectromechanical (MEMS) structure on a substrate, comprising:

10 a platform connected with a set of one or more bimorph flexures;

and

the set of bimorph flexures connecting the platform with the substrate, each bimorph flexure comprising a first layer comprised of a first material and a second layer comprised of a second material being different
15 than the first material, the first and second materials having substantially similar coefficients of thermal expansion (CTEs).

Applicants respectfully submit that Miller does not disclose, teach, or even suggest each limitation of claim 2. For instance, Miller does not disclose, teach, or even suggest a MEMS structure comprising a platform connected with a set of bimorph flexures, wherein each bimorph
20 flexure comprises a first layer comprised of a first material and a second layer comprised of a second material being different than the first material, the first and second materials having substantially similar CTEs.

The Examiner cites column 7, lines 59-65 and the flexible members 16 (FIG. 1) of Miller as disclosing flexures 16 made of two layers with substantially similar CTEs such as silicon

nitride and polysilicon. However, column 7, line 55 to column 8, line 33 of Miller states that:

...substrate 12 can be *initially coated* with dielectric isolation films of low-pressure chemical vapor deposition (LPCVD) *silicon nitride*... The first patterned layer of *polysilicon* (termed Poly-0) is generally used to form electrical interconnections... and to form ground planes as needed (e.g. underlying the platform 14, the *flexible member 16*, and the elevation members 66)... Up to four additional *polysilicon* layers can be used as mechanical (i.e. structural) layers to build up the structure of the apparatus 10... Each *flexible member 16* can be formed from a third structural layer of *polysilicon* (termed Poly-3)...

(Emphasis added.)

As such, the silicon nitride disclosed in Miller is simply used as a *coating* and not to form components of any of the MEMS apparatus of Miller. Further, in the portion cited above, Miller discloses that the flexible member 16 can be formed from *polysilicon* layers. No where in Miller is it disclosed, taught, or even suggested that the flexible member 16 is comprised of a first layer comprised of a first material and a second layer comprised of a second material being different than the first material, the first and second materials having substantially similar CTEs, as required in claim 2. Applicants respectfully request that the Examiner cite the precise portion(s) of Miller that disclose these limitations.

For the above reasons, Applicants submit that claim 2 is patentable over the cited art. Claims 3-5, 8-10, and 13 are dependent upon claim 2 and are allowable for at least the same reasons as claim 2. Further, claims 3-5, 8-10, and 13 each cite additional limitations that are not taught or suggested in Miller. The Examiner has not provided citations to portions of Miller that teach or suggest these additional limitations. Applicants respectfully request that the Examiner

cite the precise portion(s) of Miller that disclose these additional limitations so that Applicants may amend or respond accordingly.

Independent claim 14 is a method claim containing limitations similar to claim 2 (as discussed above) and allowable for at least the same reasons as claim 2. Claims 15-21 are dependent on claim 14 and allowable for at least the same reasons as claim 14.

III. Rejection Under U.S.C. 103(a)

In the Office Action, claims 6, 7, 11, and 12 were rejected under U.S.C. 103(a) as being unpatentable over Miller. Claims 6, 7, 11, and 12 are dependent upon claim 2 and are allowable for at least the same reasons as claim 2.

IV. New Claim 22

New claim 22 has been added. Independent claim 22 recites a microelectromechanical (MEMS) structure on a substrate, comprising:

a platform connected with a set of one or more bimorph flexures;
and

the set of bimorph flexures connecting the platform with the substrate, each bimorph flexure comprising a first layer comprised of a first material and a second layer comprised of a second material having substantially similar coefficients of thermal expansion (CTEs), wherein the first material comprises polysilicon deposited under a first set of conditions and the second material comprises polysilicon deposited under a second set of conditions, wherein the first and second set of conditions are different so as to induce different IRS characteristics in the first and second materials.

Applicants submit that Miller does not disclose, teach, or even suggest each limitation of new claim 22 and request that the Examiner cite the precise portion(s) of Miller that disclose

these limitations.

CONCLUSION

In view of the foregoing, it is submitted that the application is in condition for allowance.

- 5 Reconsideration of the restriction and rejections are requested and allowance is earnestly solicited at the earliest possible date.

Respectfully submitted,

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